

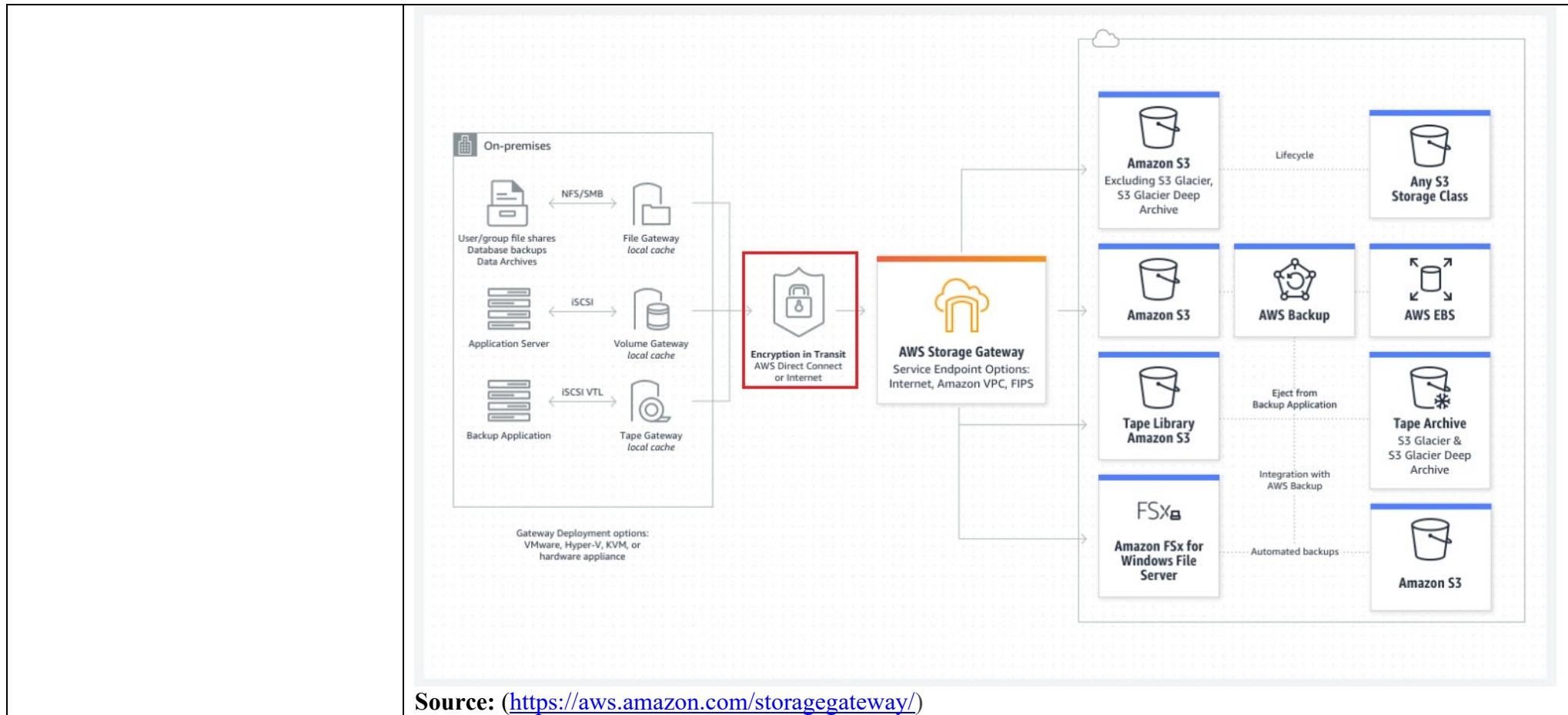
# Exhibit 1

## CLAIM CHART

### U.S. PATENT NO. 10,154,092 B2 – CLAIM 13

| <b>Claim 13</b>   | <b>Corresponding Structure in Accused Systems – Amazon.com, Inc.</b>   |
|---|--|
| [13a] A method comprising:  | <p>Amazon.com, Inc. (“Amazon”) provides a method for Network File Systems (NFS) to access Amazon Simple Storage Server S3.</p> <p>The Amazon Storage Gateway together with various equipment, services, components, and/or software utilized in providing the Amazon Storage Gateway collectively include a data sharing using distributed cache in a network of heterogeneous computers method as described by the meaning of this claim. The Amazon Storage Gateway is made available by a system owned and/or operated by Amazon.</p> |
| [13b] receiving input/output (I/O) traffic from a host device via a dedicated I/O channel at a first interface, the I/O traffic comprising a write command; | <p>The AWS Storage Gateway can receive I/O traffic from an on-premises host device via AWS Direct Connect as a dedicated I/O channel. AWS Direct Connect can work with networking features such as Amazon Elastic File System, which can provide Network File System (NFS) capabilities. The first interface is the connection between AWS Storage Gateway and AWS Direct Connect.</p>   |

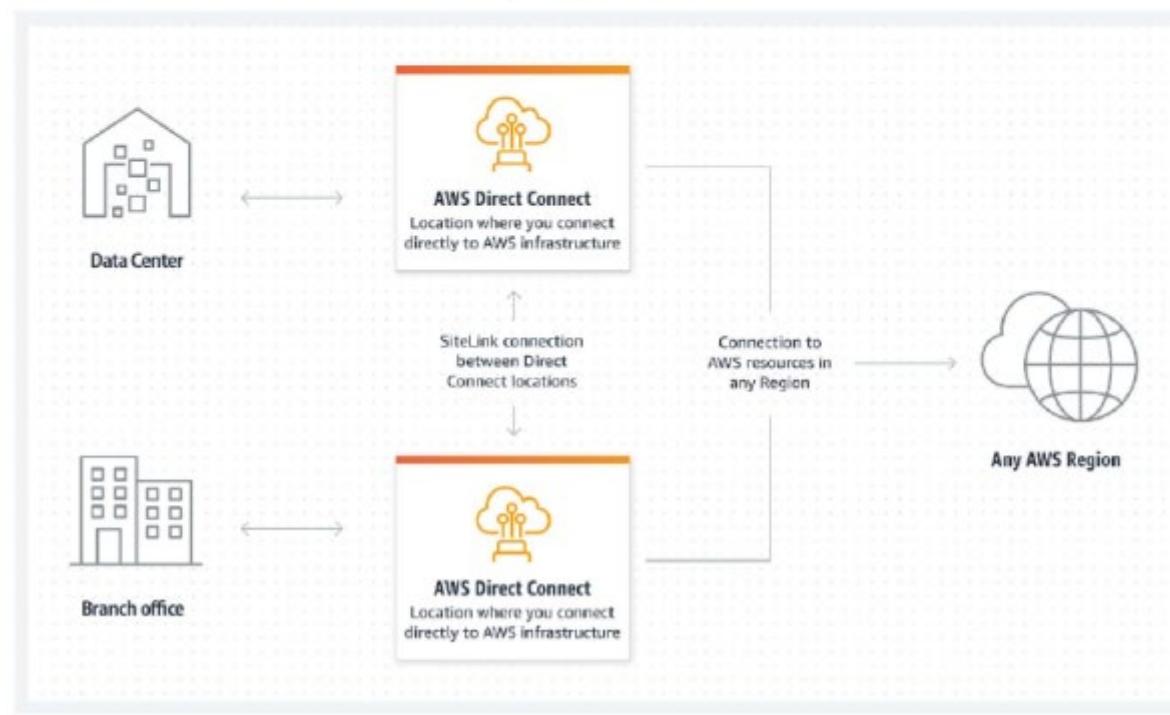
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## How it works

The AWS Direct Connect cloud service is the shortest path to your AWS resources. While in transit, your network traffic remains on the AWS global network and never touches the public internet. This reduces the chance of hitting bottlenecks or unexpected increases in latency. When creating a new connection, you can choose a hosted connection provided by an AWS Direct Connect Delivery Partner, or choose a dedicated connection from AWS—and deploy at over 100 AWS Direct Connect locations around the globe. With AWS Direct Connect SiteLink, you can send data between AWS Direct Connect locations to create private network connections between the offices and data centers in your global network.



# Exhibit 1

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|   | <p><b>Source:</b> (<a href="https://aws.amazon.com/directconnect/">https://aws.amazon.com/directconnect/</a>)</p> <p><b>Q: Can I locate my hardware next to the equipment that powers AWS Direct Connect?</b></p> <p>You can purchase rack space within the facility housing the AWS Direct Connect location and deploy your equipment nearby. However, due to security practices, your equipment cannot be placed within AWS Direct Connect rack or cage areas. For more information, contact the operator of your facility. Once deployed, you can connect your equipment to AWS Direct Connect using a cross-connect.</p> <p><b>Q: If I associate virtual private gateways (VGWs) to an AWS Direct Connect gateway, can I continue to use all VPC features?</b></p> <p>Networking features, such as Elastic File System, Elastic Load Balancing, Application Load Balancer, Security Groups, Access Control List, and AWS PrivateLink, work with AWS Direct Connect gateway. AWS Direct Connect gateway does not support AWS VPN CloudHub functionality. However, if you are using an AWS Site-to-Site VPN connection to a virtual gateway (VGW) that is associated with your AWS Direct Connect gateway, you can use your VPN connection for failover.</p> <p><b>Source:</b> (<a href="https://aws.amazon.com/directconnect/faqs/">https://aws.amazon.com/directconnect/faqs/</a>)</p> |
| [13c] receiving first data via a network at a second interface; | The AWS Storage Gateway, using the Amazon S3 File Gateway configuration, can receive data through a network, and the connection between them comprises the second interface.   |

# Exhibit 1

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| [13d] storing second data at a cache memory; storing third data at a storage device;  | The AWS Storage Gateway, using the Amazon S3 File Gateway configuration, can first commit the data (storing second data) to the local cache and store newly written data (third data) in the Amazon S3 bucket (Storage device).   |
| [13e] accessing the cache memory during processing of the I/O traffic; and  | The AWS Storage Gateway, using the Amazon S3 File Gateway configuration, can access the local cache whenever a read/write operation is performed.   |
| [13f] performing one or more access operations at the storage device based on the I/O traffic, the one or more access operations utilizing a communication path between a processor and the storage device, the communication path distinct from the dedicated I/O channel. | <p>The object stored at S3 can be directly accessed in AWS using Amazon S3 API calls. The read/write request from the NFS client to the file gateway can be communicated over NFS. The NFS client can be linked to AWS Direct Connect through Amazon Elastic File System.</p> <p><b>Source:</b> (<a href="https://aws.amazon.com/blogs/aws/amazon-efs-update-on-premises-access-via-direct-connect-vpc/">https://aws.amazon.com/blogs/aws/amazon-efs-update-on-premises-access-via-direct-connect-vpc/</a>)</p> |